

Claims

[c1] 1. A method of constructing a personal map database, comprising:

providing positioning device having a positioning functionality installed in an automobile;

setting the automobile into motion along a path towards a destination;

recording a plurality of points along the path, wherein a time each point was recorded is recorded and the recorded points and the time are stored as a positioning data;

taking one or more pictures along the path to the destination;

merging the picture(s) into the positioning data to generate a personal map database; and

generating a personal map using the personal map database.

[c2] 2. The method according to claim 1, further comprising the picture(s) are taken at one or more locations along the path corresponding to one or more recorded points, wherein the picture comprises a data including time the picture was taken.

- [c3] 3. The method according to claim 1, further comprising the picture(s) are taken at any at one or more locations along the path regardless of recorded points, wherein the picture comprises a data including time the picture was taken.
- [c4] 4. The method according to claim 2, wherein the picture is taken by using a digital camera.
- [c5] 5. The method according to claim 1, wherein the recorded points are automatically recorded at a predetermined interval of time.
- [c6] 6. The method according to claim 1, wherein the recorded points are automatically recorded at a predetermined interval of distance.
- [c7] 7. The method according to claim 1, wherein the recorded points are manually recorded.
- [c8] 8. The method according to claim 1, wherein the step of merging the picture(s) into the positioning database comprises:
 - uploading the positioning data into a data processing device;
 - uploading the pictures into the data processing device;
 - merging the pictures into the positioning data.

- [c9] 9. The method according to claim 1, further comprising a space is generated near each recorded points for displaying a time when the corresponding recorded points.
- [c10] 10. The method according to claim 8, wherein the data processing device is selected from a group consisting a Personal Computer (PC), a Personal Digital Assistance (PDA), and a portable computer.
- [c11] 11. The method according to claim 9, wherein the space near each recorded position include a time the recorded points were recorded and or a distance relative to the starting point or the current position of the positioning device.
- [c12] 12. The method according to claim 1, wherein the picture(s) represent one or more recreation spots.
- [c13] 13. The method according to claim 1, further comprising a step of searching a personal map leading to one or more recreation spots.
- [c14] 14. The method according to claim 13, wherein the step of searching the personal map leading to one or more recreation spots comprises:
executing a software for displaying the pictures representing one or more recreation spots;

selecting one or more pictures by clicking on the pictures to generate the personal map leading to the selected to recreation spots represented by the pictures, wherein a small icon is generated on or near a coordinate on locations corresponding to the selected recreation spots.

- [c15] 15. The method according to claim 14, the step of searching the personal map is implemented according to the time the picture was taken, wherein the time of the picture and the time of the recorded points are compared and calculated to find the position on the map corresponding to the time the picture was taken.
- [c16] 16. The method according to claim 14, wherein the step of searching the searching the personal map searching the positioning data for a time matching the time the picture was taken, wherein when a time of the recorded point matches with the time the picture was taken and the personal map leading to the matching recorded point is generated.
- [c17] 17. The method according to claim 14, wherein the step of searching the searching the personal map comprises searching the positioning data for a time matching the time the picture was taken, wherein when a time of the recorded point matching with the time the picture was

taken is not found, a time range between two recorded point within which the time the picture was taken falls is retrieved and calculated to find a position between the two recorded points corresponding to the time the picture was taken and a coordinate on the map the personal map leading to the matching recorded point is generated.

- [c18] 18. The method according to claim 1, wherein the positioning device comprises a Personal Digital Assistance (PDA) or a standard automobile mobile device having GPS functionality.
- [c19] 19. A device for displaying a personal map, comprising:
 - a positioning device, having a GPS function; and
 - a downloadable personal map database, downloaded into the positioning device, wherein the personal map database comprises:
 - a positioning data, comprising a plurality of points along a path, wherein a time each point was recorded is recorded ;
 - one or more pictures, taken along the path leading to one or more destinations represented by the pictures, wherein the pictures are merged in the positioning data using a software.
- [c20] 20. The device according to claim 19, wherein the posi-

tioning device comprises a PDA.

- [c21] 21. The device according to claim 19, wherein the positioning device comprises a standard automobile positioning device having GPS functionality.
- [c22] 22. The device according to claim 19, wherein the positioning device comprises a mobile phone system.